

# Domain Randomization

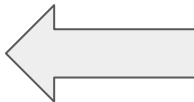
... for search and rescue applications

# Sim2Real Transfer

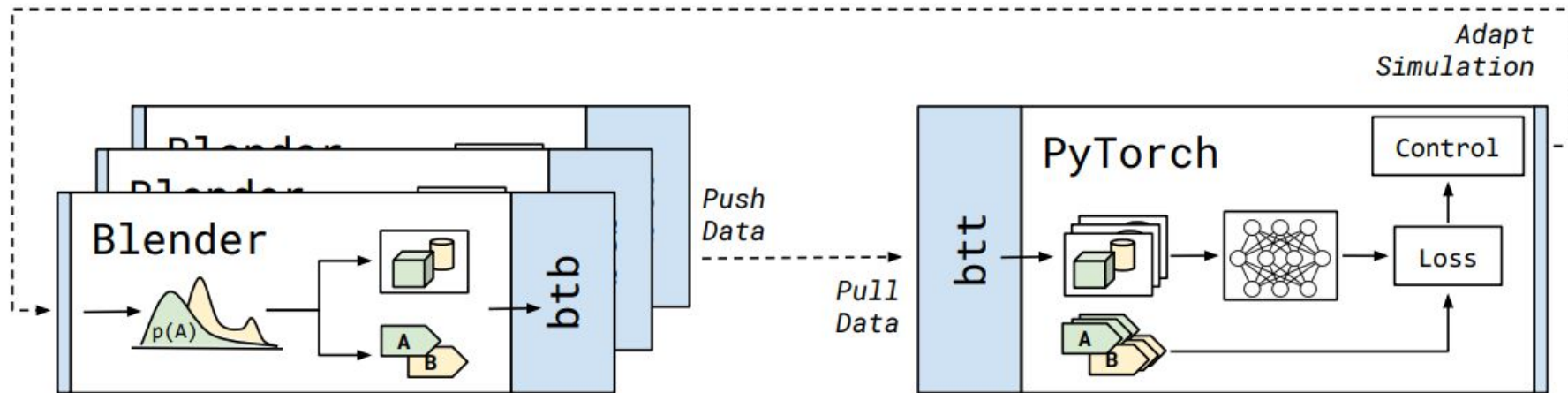
Target domain



Source domain



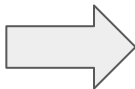
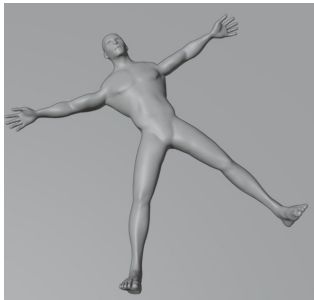
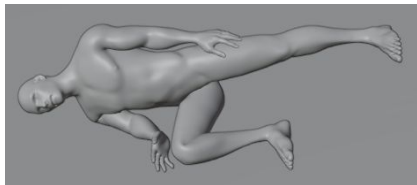
# BlendTorch





Free and open source 3D modelling software

Design in UI and/or via Python API

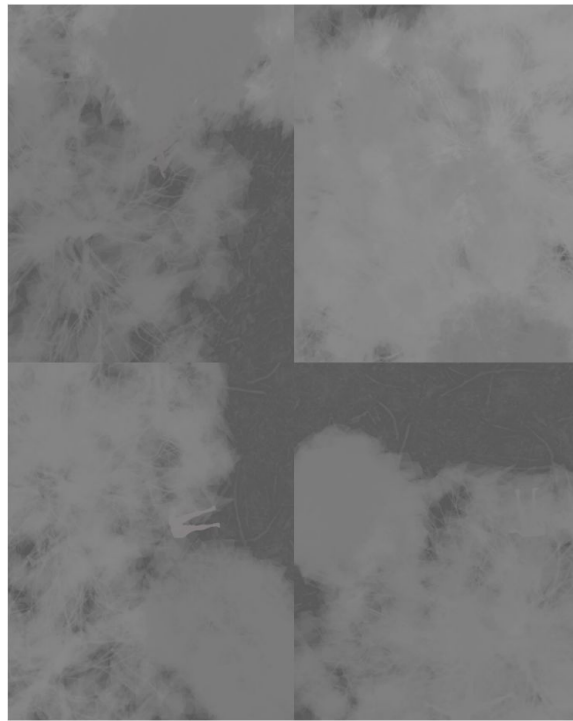
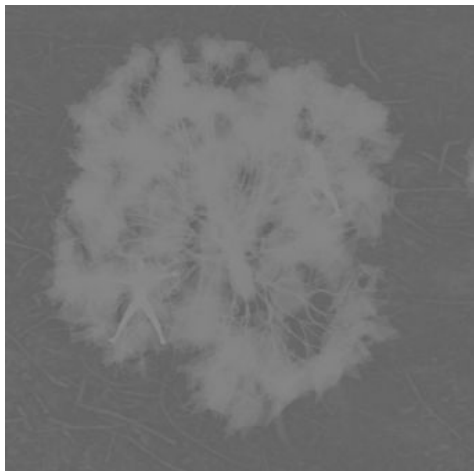


# Thermal Vision

Emission shader for every object

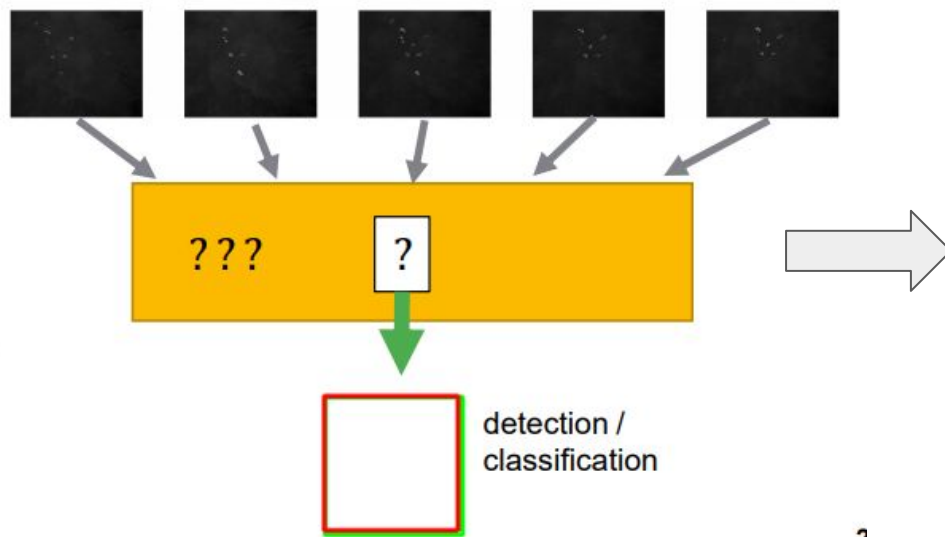
Alpha transparency for trees

Forest ground texture

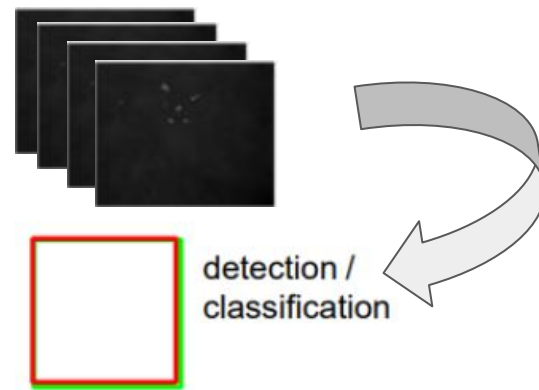




Model learning (Yolov5: <https://github.com/ultralytics/yolov5>)



Convolution:  
input channels = window size



# TODO: Experiments

Train models on real and simulation data

⇒ Compare results, adapt randomization parameters,... (domain adaptation?)

